## IN THE CLAIMS

1. (withdrawn) A street sweeper comprising:

a roller brush for directing debris to an intermediate hopper; and

a vertical chain driven conveyor apparatus comprising:

an upper driving shaft;

a lower shaft;

at least a pair of chains operatively connecting the shafts;

independent automatically adjusting chain tensioning mechanisms for maintaining tension in each of the chains; and

a plurality of flights, each flight associated with each of the chains, wherein the vertical chain driven conveyor elevates debris from the intermediate hopper to a main hopper.

2. (withdrawn) The street sweeper according to claim 1, wherein the chain adjusting mechanisms comprise a hydraulic cylinder having an extendible shaft for providing and maintaining tension in the chains.

3. (withdrawn) The street sweeper according to claim 1, wherein the chain adjusting mechanisms comprise a pneumatic cylinder having an extendible shaft for providing and maintaining tension in the chains.

4. (withdrawn) The street sweeper according to claim 1, wherein the upper driving shaft includes at least one rotatable multi-directional joint and portions of the shaft are oriented along different axes of rotation.

5. (withdrawn) The street sweeper of claim 4, wherein the at least one rotatable multi-directional joint further comprises two rotatable multi-directional joints and ends of the shaft are oriented along a horizontal axis and a central extent of the shaft between the joints is oriented at an angle with respect to the horizontal axis.

6. (withdrawn) The street sweeper of claim 1, further comprising a locking adjustment mechanism for maintaining tension in the chains when the street sweeper is turned off.

7. (withdrawn) The sweeper of claim 1 further including a wherein said adjusting mechanism includes a length adjustable shaft capable of changing the distance between upper and lower shafts.

8. (withdrawn) The sweeper of claim 7 wherein said length adjustable shaft is remotely controlled.

9. (withdrawn) The sweeper of claim 8 further including a locking adjustment mechanism for maintaining tension in the chains if the length adjusting shaft in not maintained in a tensioned state.

10. (withdrawn) The sweeper of claim 1 wherein said adjustment mechanism is attached to one of said shafts through a flexible link.

11. (withdrawn) The sweeper of claim 10 wherein said locking mechanism includes a ratchet and plurality of pawls engageable with said ratchet.

12. (Currently Amended) A chain conveyor comprising:

a first driving shaft, the first shaft comprising a at least one multi-directional rotatable joint and ends of the shaft rotate about a horizontal axis while a central extent of the shaft between the joints rotates about an axis oriented at an angle with respect to the horizontal axis;

a second shaft; ~~and~~

at least a pair of chains operatively connecting the first and second shafts and

a pressure responsive cylinder having an extendible shaft for providing and maintaining tension in the chains.

13. (original) The conveyor according to claim 12, further comprising independent automatically adjusting chain tensioning mechanisms for maintaining tension in each of the chains.

14. (original) The conveyor according to claim 13, wherein the chain adjusting mechanisms comprise a length adjustable cylinder having an extendible shaft for providing and maintaining tension in the chains.

15. (Currently Amended) The conveyor according to claim 13, wherein the chain adjusting mechanisms comprise a pressure responsive cylinder being resiliently attached to at least one of said shafts, and having an extendible shaft for providing and maintaining tension in the chains.

16. (original) The conveyor according to claim 12, further comprising a locking adjustment mechanism for maintaining tension in the chains when the conveyor Is not energized.

17. (withdrawn) A street sweeper comprising:

a roller brush for directing debris to an intermediate hopper; and

a vertical chain driven conveyor apparatus comprising:

an upper driving shaft;

a lower shaft;

at least a pair of chains operatively connecting the shafts;

a locking adjustment mechanism for maintaining tension in the chains when the street sweeper is turned off; and

a plurality of flights, each flight associated with each of the chains, wherein the vertical chain driven conveyor elevates debris from the intermediate hopper to a main hopper.

18. (withdrawn) The street sweeper according to claim 17, wherein the locking adjustment mechanism is a tensioned ratchet pawl and pin engagement.

19. (withdrawn) The street sweeper according to claim 17, further comprising a chain adjusting mechanism comprising a hydraulic cylinder having an extendible shaft for providing and maintaining tension in the chains.

20. (withdrawn) The street sweeper according to claim 19, wherein the locking adjustment mechanism is one of a check valve associated with the hydraulic cylinder and an accumulator associated with a fully enclosed pressurized system.

21. (withdrawn) The street sweeper according to claim 17, further comprising a chain adjusting mechanism comprising a pneumatic cylinder having an extendible shaft for providing and maintaining tension in the chains.

22. (withdrawn) The street sweeper according to claim 21, wherein the locking adjustment mechanism is one of a check valve associated with the pneumatic cylinder and an accumulator associated with a fully enclosed pressurized system.

23. (withdrawn) A street sweeper comprising:

means for elevating debris from an initial debris collecting area to a final debris collecting area;

means for automatically maintaining tension in a chain associated with the means for elevating debris; and

means for locking the means for automatically maintaining tension in a chain when the street sweeper is turned off.

24. (withdrawn) The street sweeper of claim 23, wherein the means for elevating debris is a vertical chain driven conveyor apparatus.

25. (withdrawn) The street sweeper of claim 23, wherein the means for automatically maintaining tension is a hydraulic cylinder associated with a vertical chain driven conveyor apparatus.

26. (withdrawn) The street sweeper of claim 25, wherein the means for locking the means for automatically maintaining tension is one of a check valve associated with the hydraulic cylinder and an accumulator associated with a fully enclosed pressurized system.

27. (withdrawn) The street sweeper of claim 23, wherein the means for automatically maintaining tension is a pneumatic cylinder associated with a vertical chain driven conveyor apparatus.

28. (withdrawn) The street sweeper of claim 27, wherein the means for locking the means for automatically maintaining tension is one of a check valve associated with the pneumatic cylinder and an accumulator associated with a fully enclosed pressurized system.

29. (withdrawn) The street sweeper of claim 23, wherein the means for locking the means for automatically maintaining tension is a tensioned ratchet pawl and pin engagement.

30. (Currently Amended) A vertical conveyor apparatus comprising:

an upper driving shaft;

a lower shaft;

at least a pair of chains operatively connecting the shafts;

independent automatically adjusting chain tensioning mechanisms for maintaining tension in each of the chains <u>including a pressure responsive</u>

cylinder having an extendible shaft for providing and maintaining tension in the chains; and

a plurality of flights, each flight associated with each of the chains.

31. (original) The conveyor apparatus according to claim 30, wherein the chain adjusting mechanisms comprise a hydraulic cylinder having an extendible shaft for providing and maintaining tension in the chains.

32. (original) The conveyor apparatus according to claim 30, wherein the chain adjusting mechanisms comprise a pneumatic cylinder having an extendible shaft for providing and maintaining tension in the chains.

33. (original) The conveyor apparatus according to claim 30, wherein the upper driving shaft includes at least one rotatable multi-directional joint and portions of the shaft are oriented along different axes of rotation.

34. (original) The conveyor apparatus of claim 33, wherein the at least one rotatable multi-directional joint further comprises two rotatable multi-directional joints and ends of the shaft are oriented along a horizontal axis and a central extent of the shaft between the joints is oriented at an angle with respect to the horizontal axis.

35. (original) The conveyor apparatus of claim 30, further comprising a locking adjustment mechanism for maintaining tension in the chains.

36. (withdrawn) A method of removing debris from a street comprising:

directing debris into an initial hopper;

elevating debris from the initial hopper to a final hopper;

maintaining tension in a plurality of chains with a shaft having rotatable joints disposed proximate ends of the shaft;

automatically maintaining tension in the plurality of chains independently with a hydraulic tensioning mechanism associated with each chain; and

maintaining tension in the plurality of chains independently with a locking adjustment mechanism that prevents slack developing in the chains.

37. (withdrawn) A method of initializing street sweeping operations comprising:

initiating an initialization program to restore tension in a plurality of chains associated with a vertical conveyor apparatus in a street sweeper, the initialization program performing at least the following;

energizing an automatic chain tensioning apparatus;

applying a tensioning force to ends of a drive shaft associated with the chains;

indicating when a desired chain tension has been achieved; and

preventing sweeping operations from occurring until the desired chain tension has been indicated.

38. (withdrawn) The method according to claim 37, wherein the initialization program automatically initiates when the street sweeper is turned on and delays sweeping operations for several seconds while chain tension is analyzed and determined.

39. (Currently Amended) A vertical chain driven conveyor comprising:

means for elevating debris from an initial debris collecting area to a final debris collecting area;

means for automatically maintaining tension in a chain associated with the means for elevating debris; and

means for locking the means for automatically maintaining tension in a chain when the conveyor ~~street sweeper~~ is turned off.

40. (original) The vertical chain driven conveyor of claim 39, wherein the means for elevating debris is a plurality of flights traveling circuitously between an initial debris hopper and a final debris hopper.

41. (original) The vertical chain driven conveyor of claim 39, wherein the means for automatically maintaining tension is a hydraulic cylinder.

42. (original) The vertical chain driven conveyor of claim 41, wherein the means for locking the means for automatically maintaining tension is one of a check valve associated with the hydraulic cylinder and an accumulator associated with a fully enclosed pressurized system.

43. (original) The vertical chain driven conveyor of claim 39, wherein the means for automatically maintaining tension is a pneumatic cylinder.

44. (original) The vertical chain driven conveyor of claim 43, wherein the means for locking the means for automatically maintaining tension is one of a check

valve associated with the pneumatic cylinder and an accumulator associated with a fully enclosed pressurized system.

45. (original) The vertical chain driven conveyor of claim 39, wherein the means for locking the means for automatically maintaining tension is a tensioned ratchet pawl and pin engagement.

46. (Currently Amended) A vertical conveyor apparatus comprising:

an upper driving wheel;

a lower driven wheel;

at least a pair of drive bands operatively connecting the wheels;

independent automatically adjusting band tensioning mechanisms for maintaining tension in each of the bands including a pressure responsive cylinder having an extendible shaft for providing and maintaining tension in the chains; and

a plurality of flights, each flight associated with each of the bands.

47. (original) The conveyor apparatus according to claim 46, wherein the band adjusting mechanisms comprise a hydraulic cylinder having an extendible shaft for providing and maintaining tension in the bands.

48. (original) The conveyor apparatus according to claim 46, wherein the band adjusting mechanisms comprise a pneumatic cylinder having an extendible shaft for providing and maintaining tension in the bands.

49. (original) The conveyor apparatus according to claim 46, wherein the upper driving wheel is operatively connected to a shaft including at least one rotatable multi-directional joint and portions of the shaft are orientable along different axes of rotation when band tension is adjusted.

50. (original) The conveyor apparatus of claim 49, wherein the at least one rotatable multi-directional joint further comprises two rotatable multi-directional joints and ends of the shaft are oriented along a horizontal axis and a central extent of the shaft between the joints is orientable at an angle with respect to the horizontal axis when band tension is adjusted.

51. (original) The conveyor apparatus of claim 46, further comprising a locking adjustment mechanism for maintaining tension in the bands.

52. (original) The conveyor apparatus according to claim 46, wherein the band adjusting mechanisms comprise a remotely adjustable mechanism for providing and maintaining tension in the bands.

53. (original) The conveyor apparatus according to claim 46, wherein the band adjusting mechanisms comprise a manual mechanical adjustment mechanism for providing and maintaining tension in the bands.

54. (original) The conveyor apparatus according to claim 46, wherein the lower driven wheel is operatively connected to a shaft orientable along a horizontal axis of rotation when band tension is adjusted.